



**Bio-Rad  
Laboratories**

Diagnostics Group  
9500 Jeronimo Road  
Irvine, California 92618-2017  
Telephone: (949) 598-1200

K002120

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AUG 21 2000

## 510(k) Summary

### Submitter

Bio-Rad Laboratories  
9500 Jeronimo Road  
Irvine, CA  
(949)598-1285  
Fax (949)598-1555

### Contact Person

Elizabeth Platt

### Date of Summary Preparation

July 12, 2000

### Device (Trade & Common Name)

Liquichek Blood Gas Control

### Classification Name

Class I, JJS  
CFR 862.1660: Controls for Blood Gases, (Assayed and Unassayed)

### Devices to Which Substantial Equivalence is Claimed

Confitest III Blood Gas Controls  
AVL Scientific Corporation  
Roswell, Georgia  
K974822 ?

### Statement of Intended Use

Liquichek Blood Gas Control is intended for use as an assayed quality control to monitor the precision of an individual laboratory's measurement of pH, pCO<sub>2</sub> and pO<sub>2</sub> by blood gas instrumentation.



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#### Description of the Device

Liquichek Blood Gas Control is a buffered bicarbonate solution in equilibrium with predetermined levels of oxygen, carbon dioxide and nitrogen.

#### Statement of How Technological Characteristics Compare to Substantial Equivalent Device

A table is provided below comparing the similarities between the Bio-Rad Liquichek Blood Gas Control and the device to which substantial equivalence is claimed.

	Bio-Rad Liquichek Blood Gas Control	AVL Scientific Confitest III Blood Gas Controls
Intended Use	An assayed quality control material for use in monitoring the precision of an individual laboratory's measurement of pH, pCO <sub>2</sub> and pO <sub>2</sub> by blood gas instrumentation.	An assayed control material for use in monitoring analyses of pH, PCO <sub>2</sub> , PO <sub>2</sub> , and Total CO <sub>2</sub> in the clinical laboratory.
Form	Liquid	Liquid
Matrix	Buffered bicarbonate solution	Buffered organic or phosphate and carbonate solutions
Levels	Three	Three plus Level 4, a normal acid-based elevated PO <sub>2</sub> (clear solution)
Storage	2-8°C	Room temperature (20-30°C)
Analytes	pH, pCO <sub>2</sub> , pO <sub>2</sub>	pH, pCO <sub>2</sub> , pO <sub>2</sub>
Open Vial Claim	Once opened, all analytes to be assayed immediately; discard the remaining material.	Aspirate liquid from the ampule immediately, following the sampling procedure for the instrument being used.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Food and Drug Administration  
2098 Gaither Road  
Rockville MD 20850

AUG 21 2000

Ms. Elizabeth Platt  
Regulatory Affairs Supervisor  
Bio-Rad Laboratories  
9500 Jeronimo Road  
Irvine, California 92618-2017

Re: K002120  
Trade Name: Liquichek Blood Gas Control  
Regulatory Class: I  
Product Code: JJS  
Dated: July 12, 2000  
Received: July 13, 2000

Dear Ms. Platt:

We have reviewed your Section 510(k) notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

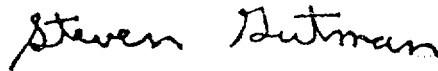
If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 895. A substantially equivalent determination assumes compliance with the Current Good Manufacturing Practice requirements, as set forth in the Quality System Regulation (QS) for Medical Devices: General regulation (21 CFR Part 820) and that, through periodic QS inspections, the Food and Drug Administration (FDA) will verify such assumptions. Failure to comply with the GMP regulation may result in regulatory action. In addition, FDA may publish further announcements concerning your device in the Federal Register. Please note: this response to your premarket notification submission does not affect any obligation you might have under sections 531 through 542 of the Act for devices under the Electronic Product Radiation Control provisions, or other Federal laws or regulations.

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This letter will allow you to begin marketing your device as described in your 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4588. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its internet address "<http://www.fda.gov/cdrh/dsma/dsmamain.html>".

Sincerely yours,

A handwritten signature in dark ink, appearing to read "Steven Gutman". The signature is fluid and cursive, with the first name "Steven" and last name "Gutman" clearly distinguishable.

Steven I. Gutman, M.D., M.B.A.  
Director  
Division of Clinical Laboratory Devices  
Office of Device Evaluation  
Center for Devices and Radiological Health

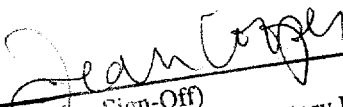
Enclosure

510(k) Number: K 002120

Device Name: Liquichek Blood Gas Control

Indications for Use:

Liquichek Blood Gas Control is intended for use as an assayed quality control to monitor the precision of ~~an~~ an individual laboratory's measurement of pH, pCO<sub>2</sub> and pO<sub>2</sub> by Blood gas instrumentation.

  
(Division Sign-Off)  
Division of Clinical Laboratory Devices  
510(k) Number K002120

(PLEASE DO NOT WRITE BELOW THE LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

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(Concurrence of CDRH, Office of Device Evaluation)

Prescription Use ☒

OR Over-The Counter Use ☐